## **Questions**

- 1) What are the procedures now used in your region for economic dispatch? See answers to questions 2 & 3
  - Who is performing the dispatch (a utility, an ISO or RTO, or other) and over how large an area (geographic scope, MW load, MW generation resources, number of retail customers within the dispatch area)? Both individual utilities and the PJM RTO are performing the dispatch of generation within the ECAR region.
- 2) Is the Act's definition of economic dispatch (see above) appropriate? Economic dispatch of electric generation is simply the method of determining the order in which blocks of generating capacity are used to serve load, in order to minimize the economic factors associated with the generation. The definition of economic dispatch in Section 1234 is essentially correct as written.

Over what geographic scale or area should economic dispatch be practiced? Economic dispatch can be practiced over any size area. The limiting factors are the costs to implement a new system versus the benefits of a larger dispatch area. The State of Ohio comissioned a study in the late 1980s or early 1990s to determine if a statewide economic dispatch would make economic sense. The cost to implement the dispatch was believed to be large enough compared to the projected benefit that a statewide dispatch was not implemented.

Besides cost and reliability, are there any other factors or considerations that should considered in economic dispatch, and why? None

3) How do economic dispatch procedures differ for different classes of generation, including utility-owned versus non-utility generation? Do actual operational practices differ from the formal procedures required under tariff or federal or state rules, or from the economic dispatch definition above? If there is a difference, please indicate what the difference is, how often this occurs, and its impacts upon non-utility generation and upon retail electricity users. If you have specific analyses or studies that document your position, please provide them.

There are a number of issues and nuances surrounding economic dispatch in practice, that make it more difficult to intuitively understand how economic cost factors are minimized. Economic dispatch, in practice, may include several cost factors. The goal of economic dispatch is to utilize the lowest incremental cost factors for the next block of dispatched capacity. While the largest incremental cost factor is usually fuel, other incremental cost factors may include incremental operation and maintenance expenses, and incremental emission allowance costs. The determination of what costs are included as incremental costs may be different from company to company. There is no difference whether the generation is owned by non-utilities or utilities, an economic dispatch will dispatch generation in lowest incremental cost order (incremental price order if LMP bid prices are used).

- 4) What changes in economic dispatch procedures would lead to more non-utility generator dispatch? If you think that changes are needed to current economic dispatch procedures in your area to better enable economic dispatch participation by nonutility generators, please explain the changes you recommend.
- This question implies that economic dispatch is being used to unfairly discriminate against non-utility generation. If proper economic dispatch procedures are being followed, non-utility generation is not participating more because it would cost more, or there are reliability constraints that prevent the generation being used more. No changes are needed to current economic dispatch procedures.
- 5) If economic dispatch causes greater dispatch and use of non-utility generation, what effects might this have on the grid, on the mix of energy and capacity available to retail customers, to energy prices and costs, to environmental emissions, or other impacts? How would this affect retail customers in particular states or nationwide? If you have specific analyses to support your position, please provide them to us. This question again implies that econmomic dispatch is being used to unfairly discriminate against non-utility generation. If non-utility generation use increases, it would be due to incremental cost factors being less the other available generation or that some reliability constraint issues have been eliminated.
- 6) Could there be any implications for grid reliability positive or negative from greater use of economic dispatch? If so, how should economic dispatch be modified or enhanced to protect reliability? There is an implication here that economic dispatch is not being utilized to the fullest practical extent. Greater use of economic dispatch can only be achieved by eliminating the non-economic (reliability) constraints, or expanding the size of the dispatch area. Proper economic dispatch is not responsible for greater or reduced system reliability, it is reliability neutral.